



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Application of:

Robert YS Huang

Examiner: Not Yet Assigned

Serial No.: 10/026,257

Group Art Unit: 2812

Filed: 12/21/2001

Title: A Mask Layer and Interconnect
Structure for Dual Damascene
Fabrication of a Semiconductor
Device

Commissioner for Patents
Box PATENT APPLICATION
Post Office Box 2327
Arlington, Virginia 22202

Sir:

SUBMITTAL OF FORMAL DRAWINGS

In response to the Notice to File Corrected Papers mailed on February 7, 2002 and the Notice of Incomplete Reply mailed on May 23, 2002, enclosed herewith are fifteen (15) sheets of formal drawings for FIGs. 1 through 29. A copy of the notices are also enclosed.

Please substitute these formal drawings for the drawings now on file in the above-identified patent application.

Respectfully submitted,

Robert L. Wolter, Esquire
Reg. No. 36,972
Beusse, Brownlee, Bowdoin & Wolter, P.A.
390 N. Orange, Avenue, Ste. 2500
Orlando, FL 32801
Telephone: (407) 926-7706
Facsimile: (407) 926-7720
Email: rwolter@iplawfl.com

10026257-062502



Certificate of Mailing

I hereby certify that a true and correct copy of the above and foregoing Submittal of Formal Drawings was furnished by First Class Mail to the Commissioner for Patents, Attention: Official Draftsperson, Post Office Box 2327, Arlington, Virginia 22202 on this 19th day of June, 2002.

Gwendolyn C. Ramsey

10026257 062502

3/2



03608

Please place this stamp inside this box → +

Approved for use through 10/31/2002. OMB 0651-0031
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

| | | |
|---|------------------------|----------------------------|
| TRANSMITTAL FORM (to be used for all correspondence after initial filing) | Application Number | 10/026,257 |
| | Filing Date | December 21, 2002 |
| | First Named Inventor | Huang, Robert YS |
| | Group Art Unit | 2812 |
| | Examiner Name | Not Yet Assigned |
| Total Number of Pages in This Submission | Attorney Docket Number | Huang 3-8-3-2-2-25-5/75903 |

| ENCLOSURES (check all that apply) | | |
|--|---|--|
| <input checked="" type="checkbox"/> Fee Transmittal Form | <input type="checkbox"/> Assignment Papers (for an Application) | <input type="checkbox"/> After Allowance Communication to Group |
| <input checked="" type="checkbox"/> Fee Attached | <input checked="" type="checkbox"/> Drawing(s) | <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences |
| <input type="checkbox"/> Amendment / Reply | <input type="checkbox"/> Licensing-related Papers | <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) |
| <input type="checkbox"/> After Final | <input type="checkbox"/> Petition | <input type="checkbox"/> Proprietary Information |
| <input type="checkbox"/> Affidavits/declaration(s) | <input type="checkbox"/> Petition to Convert to a Provisional Application | <input type="checkbox"/> Status Letter |
| <input checked="" type="checkbox"/> Extension of Time Request | <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address | <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): |
| <input type="checkbox"/> Express Abandonment Request | <input type="checkbox"/> Terminal Disclaimer | 1) Submittal of Formal Drawings |
| <input type="checkbox"/> Information Disclosure Statement | <input type="checkbox"/> Request for Refund | 2) Return Postcard |
| <input type="checkbox"/> Certified Copy of Priority Document(s) | <input type="checkbox"/> CD, Number of CD(s) _____ | |
| <input type="checkbox"/> Response to Missing Parts/ Incomplete Application | Remarks | |
| <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | | |

| SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT | |
|--|---|
| Firm or Individual name | Robert L. Wolter, Esquire Beusse, Brownlee, Bowdoin & Wolter, P.A. |
| Signature | <i>Robert L. Wolter</i> |
| Date | June 19, 2002 |

| CERTIFICATE OF MAILING | |
|---|----------------------------|
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, DC 20231 on this date: June 19, 2002 | |
| Typed or printed name | Gwendolyn C. Ramsey |
| Signature | <i>Gwendolyn C. Ramsey</i> |
| Date | June 19, 2002 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

10026257-062502

JUN 25 2002

Approved for use through 10/31/2002. OMB 0651-0032
 U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no person is required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL for FY 2000

Patent fees are subject to annual revision.

TOTAL AMOUNT OF PAYMENT (\$) 440.00

Complete if Known

Application Number 10/026,257
 Filing Date 12/21/2001
 First Named Inventor Huang, Robert YS
 Examiner Name Not Yet Assigned
 Group Art Unit 2812
 Attorney Docket No. Huang 3-8-3-2-2-25-5/75903-21

METHOD OF PAYMENT (check one)

1. ☐ The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:
- Deposit Account Number
 Deposit Account Name
- ☐ Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17
☐ Applicant claims small entity status. See 37 CFR 1.27
2. ☒ Payment Enclosed:
☒ Check ☐ Credit card ☐ Money Order ☐ Other

FEE CALCULATION

1. BASIC FILING FEE

| Large Entity | Small Entity | Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|--------------|--------------|---------------|---------------|------------------------|----------|
| 101 | 690 | 201 | 345 | Utility filing fee | |
| 106 | 310 | 206 | 155 | Design filing fee | |
| 107 | 480 | 207 | 240 | Plant filing fee | |
| 108 | 690 | 208 | 345 | Reissue filing fee | |
| 114 | 150 | 214 | 75 | Provisional filing fee | |

SUBTOTAL (1) (\$) 0.00

2. EXTRA CLAIM FEES

| Total Claims | Extra Claims | Fee from below | Fee Paid |
|--------------------|--------------|----------------|----------|
| Independent | -20" = | X | |
| Claims | - 3" = | X | |
| Multiple Dependent | | | |

*For number previously paid, if greater; For Reissues, see below

| Large Entity | Small Entity | Fee Code (\$) | Fee Code (\$) | Fee Description |
|--------------|--------------|---------------|---------------|--|
| 103 | 18 | 203 | 9 | Claims in excess of 20 |
| 102 | 78 | 202 | 39 | Independent claims in excess of 3 |
| 104 | 260 | 204 | 130 | Multiple dependent claim, if not paid |
| 109 | 78 | 209 | 39 | ** Reissue independent claims over original patent |
| 110 | 18 | 210 | 9 | ** Reissue claims in excess of 20 and over original patent |

SUBTOTAL (2) (\$) 0.00

FEE CALCULATION (continued)

3. ADDITIONAL FEES

| Large Entity | Small Entity | Fee Code (\$) | Fee Code (\$) | Fee Description | Fee Paid |
|--------------|--------------|---------------|---------------|--|----------|
| 105 | 130 | 205 | 65 | Surcharge - late filing fee or oath | |
| 127 | 50 | 227 | 25 | Surcharge - late provisional filing fee or cover sheet | |
| 139 | 130 | 139 | 130 | Non-English specification | |
| 147 | 2,520 | 147 | 2,520 | For filing a request for ex parte reexamination | |
| 112 | 920* | 112 | 920* | Requesting publication of SIR prior to Examiner action | |
| 113 | 1,840* | 113 | 1,840* | Requesting publication of SIR after Examiner action | |
| 115 | 110 | 215 | 55 | Extension for reply within first month | |
| 116 | 380 | 216 | 190 | Extension for reply within second month | |
| 117 | 870 | 217 | 435 | Extension for reply within third month | 440.00* |
| 118 | 1,360 | 218 | 680 | Extension for reply within fourth month | |
| 128 | 1,850 | 228 | 925 | Extension for reply within fifth month | |
| 119 | 300 | 219 | 150 | Notice of Appeal | |
| 120 | 300 | 220 | 150 | Filing a brief in support of an appeal | |
| 121 | 260 | 221 | 130 | Request for oral hearing | |
| 138 | 1,510 | 138 | 1,510 | Petition to institute a public use proceeding | |
| 140 | 110 | 240 | 55 | Petition to revive - unavoidable | |
| 141 | 1,210 | 241 | 605 | Petition to revive - unintentional | |
| 142 | 1,210 | 242 | 605 | Utility issue fee (or reissue) | |
| 143 | 430 | 243 | 215 | Design issue fee | |
| 144 | 980 | 244 | 290 | Plant issue fee | |
| 122 | 130 | 122 | 130 | Petitions to the Commissioner | |
| 123 | 50 | 123 | 50 | Petitions related to provisional applications | |
| 126 | 240 | 126 | 240 | Submission of Information Disclosure Sheet | |
| 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) | |
| 146 | 690 | 246 | 345 | Filing a submission after final rejection (37 CFR § 1.129(a)) | |
| 149 | 690 | 249 | 345 | For each additional invention to be examined (37 CFR § 1.129(b)) | |
| 179 | 690 | 279 | 345 | Request for Continued Examination (RCE) | |
| 169 | 900 | 169 | 900 | Request for expedited examination of a design application | |

Other fee (specify) *first month extension paid on 5/1/02

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$) 440.00

SUBMITTED BY

Name (Print/Type) Robert L. Wolter, Esquire
 Signature *Robert L. Wolter*

Registration No. (Attorney/Agent) 36,972

Complete if applicable

Telephone (407) 926-7706
 Date June 19, 2002

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Patent Examination Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

10026257-062502



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|-------------------------|
| 10/026,257 | 12/21/2001 | Robert YS Huang | Huang 3-8-3-2-25-5/7509 |

CONFIRMATION NO. 7889

FORMALITIES LETTER



OC000000007434573

BEUSSE, JAMES
Holland & Knight LLP
Suite 2600
2000 South Orange Avenue
Orlando, FL 32801

Date Mailed: 02/07/2002

NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

Filing Date Granted

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.
A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(l) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 130.**

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

A copy of this notice MUST be returned with the reply.

10026257-062502

Link C

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

10026257.062502



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|---------------------------|
| 10/026,257 | 12/21/2001 | RECEIVED S Huang | Huang 3-8-3-2-2-25-5/7509 |

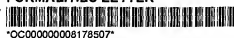
MAY 28 2002

CONFIRMATION NO. 7889

JAMES H. BEUSSE, ESQUIRE
BEUSSE BROWNLEE BOWDOIN & WOLTER, P.A.
SUITE 2500
390 NORTH ORANGE AVENUE
ORLANDO, FL 32801

BEUSSE, BROWNLEE BOWDOIN,
& WOLTER, P.A.

FORMALITIES LETTER



OC00000008178507

Date Mailed: 05/23/2002

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 05/07/2002 to the Notice to File Missing Parts (Notice) mailed 02/07/2002 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

*A copy of this notice **MUST** be returned with the reply.*

Ch. Chandra

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 1 - ATTORNEY/APPLICANT COPY

10026257.062502



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

| APPLICATION NUMBER | FILING/RECEIPT DATE | FIRST NAMED APPLICANT | ATTORNEY DOCKET NUMBER |
|--------------------|---------------------|-----------------------|---------------------------|
| 10/026,257 | 12/21/2001 | Robert YS Huang | Huang 3-8-3-2-2-25-5/7509 |

JAMES H. BEUSSE, ESQUIRE
BEUSSE BROWNLEE BOWDOIN & WOLTER, P.A.
SUITE 2500
390 NORTH ORANGE AVENUE
ORLANDO, FL 32801

CONFIRMATION NO. 7889

FORMALITIES LETTER



OC000000008178507

Date Mailed: 05/23/2002

NOTICE OF INCOMPLETE REPLY (NONPROVISIONAL)

Filing Date Granted

The U.S. Patent and Trademark Office has received your reply on 05/07/2002 to the Notice to File Missing Parts (Notice) mailed 02/07/2002 and it has been entered into the nonprovisional application. The reply, however, does not include the following items required in the Notice.

The period of reply remains as set forth in the Notice. You may, however, obtain EXTENSIONS OF TIME under the provisions of 37 CFR 1.136 (a) accompanied by the appropriate fee (37 CFR 1.17(a)).

A complete reply must be timely filed to prevent ABANDONMENT of the above-identified application.

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
 - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);

A copy of this notice MUST be returned with the reply.

Customer Service Center
Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE

10026257-062502